Serial No. 10/566,780

Atty. Doc. No. 2003P07891WOUS

Amendments to the Claims:

1.-15. (canceled)

16. (currently amended) A method for increasing the efficiency of a gas turbine system, comprising:

transferring heat energy from a waste gas of a gas turbine to a water-steam flow of a steam turbine;

further transferring additional heat energy from the waste gas to a working medium of a thermodynamic circulation process, the working medium comprising two materials with non-isothermal evaporation and condensation properties.

wherein the thermodynamic circulation process is a Kalina cycle,

wherein the thermodynamic circulation process comprises the following steps:

pressurizing the liquid working medium flow;

separating the pressurized liquid working medium flow into a first partial flow and a second partial flow;

partially vaporizing the first partial flow by transferring heat energy from the waste gas to the first partial flow;

partially vaporizing the second partial flow by transferring heat energy from a partially condensed and expanded working medium flow;

combining the partially vaporized first and second partial flows into a partially vaporized working medium flow;

creating a gaseous working medium flow by vaporizing the partially vaporized working medium flow by transferring heat energy from the waste gas to the working medium flow;

converting the thermal energy of the gaseous working medium flow into a useful form by expansion of the gaseous working medium flow in a turbine;

further condensing the partially condensed, expanded working medium flow to form the liquid working medium flow.

17.-18 (canceled)

Serial No. 10/566,780

Atty. Doc. No. 2003P07891WOUS

19. (currently amended) The method as claimed in claim 1816, wherein with the first partial flow and the liquid working medium flow have similar temperatures.

- 20. (previously presented) The method as claimed in claim 19, wherein the waste gas entering the thermodynamic circulation process has a temperature of 100 to 200°C.
- 21. (previously presented) The method as claimed in claim 20, wherein the waste gas entering the thermodynamic circulation process has a temperature of 140 to 200°C.
- 22. (previously presented) The method as claimed in claim 21, wherein the useful form of energy is either electrical or mechanical energy.

23.-30. (canceled)